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### THE

# Tarheel Washoff



### SOIL EROSION SERVICE UNITED STATES DEPARTMENT OF THE INTERIOR NORTH CAROLINA AREA

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HIGH POINT, NORTH CAROLINA November 15, 1934

### Erosion Handbook Out

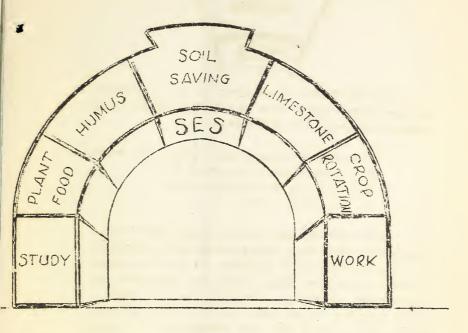
SOIL EROSION CONTROL AND LAND-USE PROGRAM as being conducted by the Soil Erosion Service in cooperation with the landowners of the Deep River and Reedy Fork Creek watersheds of Forsyth, Guilford and Randolph counties is the subject of a 32-page handbook just off the press.

ANSWERS TO PERTINENT QUESTIONS regarding the benefits to be had from the government in helping landowners to prevent the serious washing of their lands are contained in the publication, as well as detailed information pertaining to the scope of the work. Also complete directions for seeding and use of crops for erosion control purposes are given.

THE HANDBOOK WAS PREPARED by W. E. Bowers, agronomist of the Soil Erosion Service staff, while the counties involved financed the publication.

COPIES ARE TO BE MAILED to those owning land in the two watersheds. Additional copies may be had from county agents in the counties mentioned or by writing to the Soil Erosion Service, High Point.

### SOUND AGRICULTURE



### The Approach to Successful Farming

SUCCESSFUL FARMING requires a program of efficient coordination of operations as portrayed in the units of the arch shown above.

THE SOIL ERCSION SERVICE aims to help the farmer to coordinate these principles into a sound, well balanced soil-saving, soil-building and income-increasing program.

LET'S GIVE SEPATATE TREATMENT to each unit, starting with the Keystone or the most important unit of the arch (continue over).



THE KEYSTONE of an arch is the crowning wedge-shaped unit upon which the value of the remainder rests or depends.

"Tis the Keystone that makes the arch;
The rest that there were put
Are nothing till that comes
To bind and shut."

SOIL-SAVING and intelligent land-use, including woodland management, as sponsored by the Soil Erosion Service is the Keystone to the structure that spans the approach to successful farming. Improper use of land soon results in an impoverished soil which means low yields and low standards of living, submerged farm families, and in time complete abandonment of the farm. Such land becomes a burden to the community, to the state and to the nation.\*

IF A PERMANENT PROGRAM of soil-saving is not practiced, it scarcely is good hard sense to compel ourselves to slave and depend upon the hopeless task of trying to keep the soil producing profitably by hit-or-miss methods of tillage and cropping.

<sup>\*</sup> THERE ARE already 35,000,000 acres of land made worthless by erosion in the United States.



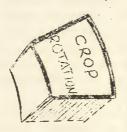
LIMESTONE IS NECESSARY to any permanent and profitable agriculture. Its use on erosive land, however, is hardly to be justified until after means to prevent serious rainwash have been established, or where the land is to be seeded to soil-saving crops, since the lime will be washed away.

LIMESTONE IS ESSENTIAL to the growing of all leguminous crops. These crops add nitrogen to the soil for crops that follow to consume that they may produce profitable yields. Soil acidity where corrected by limestone prevents the deterioration of soil fertility.

THE EFFECT of even a moderate liming lasts for a number of years. Appreciable increases in crop yields from a single application continue for at least eight years.

LIMING MATERIALLY INCREASES the yield of nearly all farm crops. However, don't get the impression it can be used as a fertilizer -- it cannot. Limestone may be applied at any time, and for any crop to meet the convenience of the farmer. The main thing is to get it on the land. Consult the agronomists of the Soil Erosion Service about lime for your needs.

THE HUMUS CONTENT proves one of the most important constituents of a productive soil. It is put into the soil by applications of farm manures and by plowing under crops, preferably legumes. Humus puts life into the soil by stimulating bacteria action, which in turn makes plantfood more available. Humus helps to prevent the soil from drying out and also better maintains crops in time of drought. Humus causes soil to work easier and hold more moisture. Soils containing most humus erode least.



PROPER ROTATION OF CROPS is of great importance in a program of soil conservation and a sound farming structure. A good crop rotation assists in building the soil, in maintaining its fertility, preventing erosion, and increasing soil resistence.

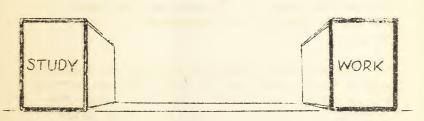
PROPER CROP ROTATIONS, in which legumes must be included, aid the farmer to balance his farm business and cut down over-production. The lack of it makes necessary larger cropping and less profitable acreage.



AFTER ALL THE STEPS as outlined have been taken then applications of commercial fertilizers as sources of plantfood prove highly beneficial. However, fertilizer does not take the place of limestone.

WE CAN'T REPEAT this fact too often:
Rainwash takes as much plantfood from the soil
in one year as the farmer can crop out in 20
years. Most of the plantfood in runoff is in
solution and goes on downstream into the sea,
forever lost.

### Enterprise



OF COURSE IT IS RECOGNIZED that no effort, farming or other, can hope to go very far unless it has its foundation in study and work. These two specifications to successful enterprise of any kind need no emphasizing.

### Erosion Work Attracts Sale

W. O. ATKINS, well-known farmer of the Colfax section of Guilford County, became a staunch supporter of the Soil Erosion Service work with its inception, but his enthusiasm was caused to soar even higher. But let Mr. Atkins tell his own story:

"A RAILROAD ENGINEER has been running his train by my place for several years. If he was-ever interested in buying it, he never let on to me--not until recently.

"HOWEVER, AFTER SEEING THE WORK that the Soil Erosion Service was doing on the farm, he visited me and offered to buy some of the land, so impressed was he."

### Employ College Graduates

THE EMPLOYMENT by the Soil Erosion Service of around 100 recent college graduates at regular PWA rates of 45 cents an hour has been authorized by the Department of the Interior.

MEN WHO HAVE COMPLETED courses in subjects related to the work of the Soil Erosion Service will be given preference. They will work for a period of about six months and after hours will attend an erosion-control school conducted by members of the staff of the Soil Erosion Service.

MEN IN THIS GROUP who show an aptitude for the work may have opportunity for advancement.

### Agronomy Activities

60 CARLOADS of dolomitic limestone, sufficient for liming 2500 acres, will be distributed in the near future to cooperating landowners of the Deep River valley, according to A. H. Veazy, agronomist of the Soil Erosion Service.

THE LIME WILL BE DELIVERED to the cooperators from central railroad distributing points at Jamestown, High Point, Colfax and Climax.

DISTRIBUTION OF SEED for pasture mixtures will be suspended by the agronomy department on November 1 and will be resumed in February.

### Landowners Seek Work

SINCE THE FIRST OF JULY more than 400 landowners, owning 35,000 acres in the Deep River valley, have entered into cooperative agreement with the government to control erosion.

750 INVITATIONS for erosion-control work involving 50,000 acres have been received by the Soil Erosion Service from landowners in the area. The invitations are being followed up as rapidly as possible.

### Visitors Make Tour of Area

50 farmers from Granville and Rockingham counties visited the Deep River valley recently to study the work of the Soil Erosion Service.

### Forest Seedlings by the Thousands

THE FORESTRY DEPARTMENT of the Soil Erosion Service has announced plans to reforest 1500 acres of worn-out land in the Deep River and Brown Creek erosion-control areas of North Carolina.

1,500,000 SEEDLINGS will be required for this season's planting, which will be started around December 1. Most of the trees will be pines, black locust and yellow poplar, with a smaller amount of walnut and white oak. About 120,000 seedlings of cedar, catalpa, hackberry, ash, honey locust, and cypress will be planted on land particularly suited to these species.

THE SOIL EROSION SERVICE is laying plans to plant 11,000,000 tree seedlings for erosion-control purposes during the winter of 1935-36.

IN ORDER TO MAKE SURE of the supply for next season the forestry department has completed a seed collection that will provide 90 percent of the required seedlings.

INCLUDED IN THE COLLECTION are 33,000 pounds of black walnut, 2080 pounds of white oak, 1040 pounds of loblolly pine, 600 pounds of yellow poplar, 50 pounds of longleaf pine, and 50 pounds of shortleaf pine.

TUNE IN OVER WBT, Charlotte, 6 to 6:15 Friday's Nov. 16, Nov. 23 and Nov. 30 for broadcasts on soil-erosion control.

### Southern Nurserymen Approve Work

THE SOUTHERN NURSERYMEN'S ASSOCIATION at its annual convention recently in Asheville was addressed by W. E. Bowers of the Soil Erosion Service staff and adopted resolutions favoring the erosion-control movement, as follows:

WHEREAS, the soil being the most essential asset of our nation under any and all economic conditions, and that hope of national security depends ultimately on wealth which must come from the soil, and

WHEREAS, our government, recognizing the great damage resulting from soil washoff from Southern farms, has established several soil erosion-control areas in the South to demonstrate soil conservation in connection with a modified land-use program, therefore, be it

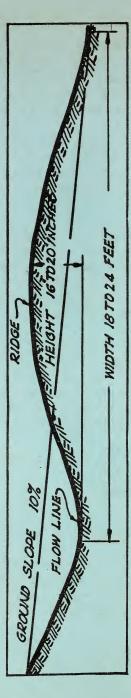
RESOLVED, that we, members of the Southern Nurserymen's Association, commend the government in its effort to arrest unrestricted soil erosion in the South and other sections, and recommend that increasing attention be given to soil conservation as a national policy.

-- W. C. Daniels, Secy.

### We Repeat

DURING A 50-YEAR PERIOD from 1880 to 1930 the increase in cultivated land in North Carolina was 34 percent. During the same period the expenditure for fertilizer in the state increased 1600 percent.

# THE MANGUM TERRACE



The Mangum fits the farmer's desire for a terrace

- (1) Causes the least loss of cultivated area,
- (2) Is easily crossed with machinery, and
- (3) Permits a gradual runoff of excess rainwater.

The channel of the Mangum terrace is wide and flat enough to slow up the flow of water, while the

ridge is sufficiently high to prevent breaking during heavy rains.

A Mangum terrace may appear high when first built but after it has been harrowed or plowed and subjected to a few heavy rains it settles considerably. A new terrace has to be built 18 inches high to obtain a final desired height of 12 to 14 inches.